

ON THE ANT-GENUS CHRYSAPACE CRAWLEY.

BY WILLIAM MORTON WHEELER.

Bussey Institution, Harvard University.

Very recently Mr. W. C. Crawley has described a beautifully sculptured Ponerine ant from Sumatra as *Chrysapace jacobsoni* gen. et sp. nov. (Ann. Mag. Nat. Hist. (9) 13, 1924, p. 380). Among a lot of Formicidæ generously sent me by Dr. K. W. Dammerman of the Buitenzorg Museum I find a specimen of this same insect, which was taken by Karny at Wai Lima, Lampong, Southern Sumatra, Nov. 12, 1921. It agrees in all respects with Crawley's description and figure and awaited description in my collection under the label "*Cerapachys mirandus* sp. nov." Crawley's description of the sculpture is somewhat incomplete. In my specimen, which like his possesses three small, closely approximated ocelli and is therefore apparently an ergatomorphic female, the ventral surface of the post-petiole is very regularly, transversely costate and the sternites of the second, third and fourth gastric segments, which are exposed, have their basal surfaces developed as very finely striated stridulatory organs and their apical borders pitted, or cribrate.

Crawley calls attention to the affinities of this insect with *Cerapachys* F. Smith and *Phyracaces* Emery but decides to make it the type of a distinct genus. In my opinion the matter is not quite so simple. In the Ponerinæ of the "Genera Insectorum" (1911) Emery recognized *Cerapachys* and *Phyracaces* as independent genera, the differences being that in the former the worker and female have the terminal antennal joint enlarged to form a distinct club and the petiole and postpetiole non-marginate on the sides, whereas, in the latter the terminal antennal joint is not enlarged to form a club but tapers to a blunt point and the sides of the petiole and sometimes also of the postpetiole are marginate. Crawley's genus is clearly intermediate in that the body is that of a *Cerapachys* s. str. while the antennæ are those of a *Phyracaces*. The peculiar sculpture cannot be regarded as a generic character and the narrowness of the petiole and

postpetiole recurs in the East Indian *Cerapachys antennatus* F. Smith, which happens to be the type of the genus.

Emery seems to have regarded the non-clavate antennæ and margination of the petiole as more important characters than the number of antennal joints since he made *Phyracaces* an independent genus and separated *Cerapachys* into four subgenera on this character, namely *Cerapachys* sens. str. with 12, *Parasyscia* with 11, *Oöceræa* with 10 and *Syscia* with 9 joints. But the finding of an intermediate form like *Chrysapace* brings us face to face with a dilemma. Either we must raise all the subgenera mentioned to generic rank and retain *Chrysapace* and *Phyracaces* as independent genera or we must reduce these two genera to subgeneric rank under *Cerapachys*. The "splitters" will probably adopt the former, the "lumpers" the latter alternative. Should the lumpers carry the day the specific name of Crawley's species will have to be changed, because Forel had previously described a *Cerapachys jacobsoni* from Java (Notes Leyden Mus. 34, 1912, p. 103). In that case I suggest that the Sumatran ant be called *Cerapachys (Chrysapace) crawleyi* nom. nov. It is, however, not improbable that we shall do more splitting in the Cerapachyinae in the near future. The subfamily is proving to be more extensive than we had supposed. Mr. James Clark and I have recently brought to light quite a number of species of *Eusphinctus* and *Phyracaces* in Australia and there are several diverse, undescribed species of *Cerapachys* and *Phyracaces* from the East Indies in my collection. The sexual phases, larvæ and pupæ of the great majority of Cerapachyinae are quite unknown. A knowledge of these phases and stages will probably aid materially in a final revision of the genera and subgenera of the subfamily.